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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 25

Application Number: 09/331,959  
Filing Date: September 28, 1999  
Appellant(s): DUBOUIS, RAYMOND

\_\_\_\_\_  
Scott Cummings  
For Appellant

EXAMINER'S ANSWER

**MAILED**

JUN 04 2002

**GROUP 1700**

This is in response to the appeal brief filed March 18, 2002.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because appellants separate claims 2 to 8, 13 and 14 from claim 11. Claims 2 to 8, 13 and 14 depend, either directly or indirectly, upon claim 11. It is unclear why appellants believe that claims 2 to 8, 13 and 14 stand or fall together with claim 1 rather than claim 11.

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

5,543,450	Takita et al.	8/1996
4,110,300	Matsushita	8/1978
JP 50 97644,	8/1973	

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1 to 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takita et al.

Takita et al. teach a silicone rubber composition that contains a cerium containing compound, an iron oxide component and/or titanium oxide. See the summary of the invention on column 2. The composition also contains a platinum component. Particular attention is drawn to the compositions 1 and 2 in Table 1 on column 6. This teaches a silicone rubber composition containing a platinum complex, claimed component B1, and cerium oxide, claimed component B2, in amounts that meet those required in claim 1. These examples differ from that claimed in that the claimed polyorganosiloxanes composition D requires an alkenylsilyl group carrying constituent and a hydrosilyl group carrying constituent. The silicone rubber exemplified by Takita et al. contains only alkenylsilyl groups. The silicone rubber in Examples 1 and 2 cure by means of a peroxide catalyst rather than curing by means of a hydrosilyl group constituent.

Beginning on the bottom of column 4 through column 5, Takita et al. describe various means by which the silicone rubber can cure. They teach that conventional means such as peroxides or hydrosilyl group containing siloxanes can be used in the alternative to cure the composition.

Thus one having ordinary skill in the art would have been motivated by the teachings of Takita et al. to cure the compositions found in the examples by adding a hydrosilyl group containing compound to the composition rather than using a peroxide catalyst with a reasonable expectation of success in view of the fact that Takita et al. clearly teach the alternative use of these two conventional means of curing silicone rubbers. In view of the fact that the presence of a peroxide catalyst rather than a hydrosilyl group containing compound is the only difference between Examples 1 and 2 and that claimed, and the fact that this difference is rendered obvious by the teachings of Takita et al., the instantly claimed composition would have been obvious to one having ordinary skill in the art.

With regards to claims 11, 17, 19 and 21, the Examiner notes that the claimed method reads on forming an article from the composition (effective amount, as claimed, reads on forming an article solely from the silicone rubber composition). Takita et al. form articles from the silicone rubber therein. The phrase "of enhancing the arc-tracking

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and arc-erosion resistance of properties of an article" is a preamble that does not breathe life or meaning into the claimed method.

2. Claims 1 to 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 50-97644 (herein '644) in view of Matsushita.

'644 teaches self extinguishing silicone rubber compositions containing a mixture of a platinum compound (claimed A1) and an iron oxide compound (claimed A3), which meets the claimed mixture A. These compounds are present in an amount which meets that required by claim 1. See for instance the top of page 2. This composition contains an alkenylsilyl containing siloxane and differs from that claimed in that it cured by means of a peroxide catalyst rather than a hydrosilyl containing compound.

Matsushita teaches similar self extinguishing silicone rubber compositions that contain iron oxide. The bottom of column 4 through the top of column 5 teaches that the silicone rubbers therein can cure by means of a peroxide or, in the alternative, by means of an organohydrogen polysiloxane. Matsushita teaches that these are known curing catalysts for silicone rubbers.

Thus one having ordinary skill in the art, upon reviewing the teachings of '644 and the teachings of Matsushita, would recognize that the silicone rubber composition in '644 could cure by means of adding a hydrosilyl group containing siloxane rather than by means of a peroxide catalyst with a reasonable expectation of success. It is prima facie obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. The express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. In this instance, it would have been obvious to substitute one known means of curing a silicone rubber for another, thereby rendering obvious the instant claims. In view of this, one having ordinary skill in the art would have found the claimed composition obvious over the teachings of the prior art.

With respect to claims 11, 17, 19 and 21, again note that '644 prepares an article from the silicone rubber, thereby meeting the claimed method since the claimed method

is defined only by incorporating the composition into an article (effective amount, as claimed, reads on forming an article solely from the silicone rubber composition).

**(11) Response to Argument**

1. The rejection over Takita et al.

Appellants' initial argument for this rejection, that Takita et al. fails to disclose or suggest the polyorganosiloxanes composition D as defined by claim 1, is neither persuasive nor understood.

Polyorganosiloxane composition D as defined by claim 1 requires an alkenylsilyl group carrying constituent and a hydrosilyl group carrying constituent which is crosslinkable at room temperature or with heat in the presence of platinum catalyst by reactions between the alkenylsilyl and hydrosilyl groups. Such a composition is specifically taught on the top of column 5 in Takita et al. It is unclear why appellants are of the opinion that such a composition is not disclosed or suggested.

With regards to the claims of Group II, while Takita et al. do not teach arc tracking or arc erosion resistance, the method claimed is met by a method of forming an article from the required composition. During examination, statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art. If so, the recitation serves to limit the claim. See, e.g., *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963). In the instant process claim, the phrase "of enhancing the arc-tracking and arc-erosion resistance properties of an article" does *not* result in a manipulative difference in the method steps per se. Thus the method step claimed, i.e. incorporating the composition into an article, is met by Takita et al.

With regards to appellants' arguments of unexpected results, these too are not sufficient to overcome the obviousness rejection. First the Examiner notes that the comparative examples are not over the closest prior art, which differs from that claimed

only by means of the curing agent. The Examiner also notes that Tables I and II show silicone compositions having iron oxide and platinum compounds. This carries no weight in establishing unexpected results for a cerium oxide and platinum compound containing composition. Appellants have not shown unexpected results for the entirety of the claims, and specifically for the combination of cerium oxide and a platinum compound, the additives found in Takita et al.

With regards to the argument that Takita et al. do not address the problem of arc resistance, appellants are reminded that a prima facie case of obviousness (for a composition) does not require the solution of the same problem or recognition of the same advantages as the applicants invention. In re Dillon 16 USPQ2d 1897 (CAFC, en banc, 1990), which overrules In re Dillon 13 USPQ 2d 1337 and In re Wright 6 USPQ 2d 1959.

The Examiner has established the obviousness of the claimed composition and method. Appellants' efforts to establish non-obviousness are not persuasive for the reasons noted supra. As such, this rejection is maintained.

2. The rejection over JP '644 in view of Matsushita.

Regarding the first argument, the Examiner disagrees that there is no motivation to combine the references. The references are analogous arts and Matsushita teaches that peroxides and hydrosiloxanes are known curing agents used in the alternative for curing silicone rubbers. Appellants' argument that Matsushita teach away from combining the references because Matsushita is an improvement over the '644 is merely a straw man. Appellants are trying to confuse the issues in this case. While Matsushita teaches an improvement over '644 this has no bearing on the fact that Matsushita teaches the alternative and functionally equivalent use of peroxides and hydrosiloxanes as silicone rubber curing agents. The Examiner could have picked one of hundreds of references showing that the alternative use of these curing agents is well known in the art. In fact, Takita et al., cited supra, teach this.

The fact that this rejection relies on a secondary reference that is an improvement over the primary reference does not negate the fact that one having ordinary skill

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in the art would have had a reasonable expectation of success in using a hydrosiloxane curing agent in place of the peroxide curing agent used in '644 in view of the fact that they are known to be used in the alternative to cure silicone rubbers. "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

Evidence of unexpected properties may be in the form of a direct or indirect comparison of the claimed invention with the closest prior art which is commensurate in scope with the claims. See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Again, with regards to appellants' alleged showing of unexpected results, the Examiner notes that the results are not shown over the closest prior art, which again differs from that claimed only by the silicone rubber curing agent. Also these showings are nowhere near being commensurate in scope with the breadth of that claimed.

Finally, with regards to the fact that '644 and Matsushita fail to consider the problem of arc resistance, the Examiner relies on the rationale provided supra for the Takita et al. rejection.

Thus the Examiner maintains that the instant claims would have been obvious over the teachings of the prior art. The teachings of Matsushita clearly suggest to the skilled artisan that the silicone rubber in '644 could be cured by using a hydrosiloxane rather than a peroxide, thereby rendering obvious the instant claims. Appellants have failed to establish that the claimed invention demonstrates any unexpected results, specifically over the closest prior art. As such, this rejection is maintained.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
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Primary Examiner  
Art Unit 1712

mgm

June 3, 2002

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